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| EXAMINER |
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TRAN, MYLINH T

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2179

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**MAILED**

**APR 06 2007**

**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/843,755  
Filing Date: April 30, 2001  
Appellant(s): SILVERSTEIN, D. AMNON

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Patrick C. Keane  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/15/06 appealing from the Office  
action mailed 06/08/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

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|           |                |         |
|-----------|----------------|---------|
| 5,714,972 | Tanaka et al.  | 02/1998 |
| 6,501,464 | Cobbley et al. | 12/2002 |
| 6,359,615 | Singh          | 345/173 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 5-15 are rejected under 35 U.S.C. 102(b) as being Tanaka et al. [US. 5,714,972].

**As per independent claims 1 and 10, Tanaka teaches a computer**

implemented method and corresponding system for displaying information related to a physical document comprising the steps/means:

a movable display (e.g., fig. 13., col. 8, lines 55-56) comprising:

means for detecting movement of the movable display relative to a first surface (col. 3, lines 37-55); means for correlating movement of the movable display to

information representing a portion of a first image stored in a database (col. 3, line 56 - col. 4, line 9); and  
presenting the information on the movable display (col. 3, lines 60-61), wherein the detecting means is configured to detect orientation of the movable display (column 3, lines 53-55, "The position detector, for example, detects the position in the horizontal and vertical directions", figure 13, four arrows represent four orientations of the display screen).

**As per claims 2 and 3**, according to Tanaka's teaching at col. 3, line 56 - col. 4, line 9, it is inherent in Tanaka's system that the detecting means is a transducer included within the movable display wherein the transducer is used to correlate movement of the movable display to a change in position on a stored image.

**As per claim 11**, Tanaka teaches the detecting means being configured to detect orientation of the movable display (e.g., col. 3, lines 53-55).

**As per claims 5, 6 and 12**, Tanaka teaches the correlating means including a processor (col. 7, lines 7-11) and associated memory (col. 7, lines 1-3) wherein the database is stored in a memory on board the movable display (e.g., col. 6, lines 14-15).

**As per claims 7, 8, 13 and 14**, Tanaka teaches the information being stored in a database remote from the movable display wherein the information stored remote to the movable display is accessed via a wired link (e.g., col. 2, lines 50-54).

**As per claims 9 and 15**, Tanaka teaches the information stored remote to the movable display being accessed via a wireless link (e.g., col. 2, lines 50-54).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. in view of Cobbley [US. 6,501,464].

**As per claim 16**, Tanaka does not disclose the first image being an image of a keyboard that can be operated using the moveable display. Cobbley discloses the first image being an image of a keyboard that can be operated using the moveable display at col. 1, lines 8-30. It would have been obvious to an artisan at the time of the invention to use the teaching from Cobbley of operating an image of a keyboard using the movable display in Tanaka's system since it would allow the system using keyboard functionality without the need of a physical keyboard.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Singh [US. 6,359,615].

**As per claim 17**, Tanaka does not disclose a first portion of the first image being displayed at a first resolution and a second portion of the first image

being displayed with a reduced resolution relative to the first resolution. Singh disclose a portion of the first image being displayed at a first resolution (30 of fig. 6) and a second portion of the first image being displayed with a reduced resolution (42 of fig. 6) relative to the first resolution. It would have been obvious to an artisan at the time of the invention to use the teaching from Singh of displaying a portion of the first image at a first resolution and a second portion of the first image with a reduced resolution relative to the first resolution in Tanaka's system since it would increase the amount of information that can be displayed within a screen.

#### **(10) Response to Argument**

##### **The Tanaka's reference discloses:**

The Tanaka's invention provides a display apparatus which is capable of retaining the visibility of a display image during display updating and in which the position of the displayed portion within the entire image information, after updating, can be easily recognized; and provides a display apparatus which comprises position detecting means for detecting the position of a display screen, and selecting means for selecting a portion of the image information stored in image storing means, characterized in that, assuming that the entire image information stored in the image storing means is drawn in a viewing field space fixed relative to the eye, the image information drawn in a subspace that the display screen occupies in the viewing field space is shown on the display screen.

The Tanaka's invention also provides an image display method comprising the steps of detecting the position of a display screen, designating on the basis of the detected position a portion to be displayed in a subspace that the display screen occupies in a viewing field space when the entire image information is drawn in the viewing field space, and supplying the image information corresponding to the display image portion displayed in the subspace that the display screen occupies to the display screen for viewing.

The Tanaka's invention also teaches the stored image information being drawn in its entirety in the viewing field space fixed relative to the eye, the image drawn in the subspace the display screen occupies in the viewing field space is selected for display on the display screen, and by moving the display screen, the displayed portion of the image information is updated accordingly; even when the position of the display screen is changed, since the displayed image information remains fixed in the viewing field space, the image visibility is retained during the movement of the display screen, and it is easy to recognize the position of the displayed portion in the entire display image.

The Tanaka's invention further teaches the enlarging/reducing means being provided so that the display image can be enlarged or reduced in size as desired, for enhanced viewing. As described, since the image information is displayed in fixed relationship to the eye, the present invention provides the enormous practical advantages that the image is easy to view during the



movement of the display screen and also that it is easy to recognize the position that the display image occupies in the entire image information.

**Appellant has argued the following points:**

- 1) Tanaka et al. do not disclose a detecting means configured to detect "orientation" of a movable display.
- 2) Combination of Tanaka and Cobbley do not suggest "correlating movement of a moveable display to information representing a portion of a first image stored in a database, wherein the first image is an image of a keyboard that can be operated using the moveable display".

**The Examiner disagrees for the following reasons:**

- 1) Appellant states that the ability to detect "orientation" encompasses an ability to detect rotation of the display. However, in the Computer Dictionary, "orientation" is defined as "landscape mode" or "compare "portrait mode" which is "a horizontal print orientation in which text or images are printed "sideways" that is, the width of the image or the page is greater than the depth". In the Collegiate Dictionary, "orient" is defined as "(a) to cause to face or point toward the east; (b) to set or arrange in any determinate position in relation to the points of the compass".

The above definitions do not limit "detecting orientation" being as "detecting rotation". Further, the present specification does not provide explicit definition of "orientation" or the equivalent thereof. Due to the lack of definition, the

examiner interprets the "detecting orientation" being "detecting position" as the broadest reasonable interpretation that would allow.

Tanaka, at column 3, lines 53-55, describes a position detector included within the disclosed device is provided for detecting position in horizontal and vertical directions. "The position detector detects the position in the horizontal and vertical directions" means "detecting orientation".

Appellant's specification paragraph [0019] on pages 5-6 describes "tracking enough positional coordinates so that changes in orientation of the display can be determined. Such a feature can be used to ensure that portions of an image will be oriented on a movable display in a manner as desired by a user. When, for example, a user reorients a rectangular display to provide a larger viewing area along a given direction (e.g., where an image is tall and thin, and best viewed by rotating the display 90), the image will appear properly oriented within the display".

Therefore, Tanaka patent still reads over the claimed language itself "the detecting means is configured to detect orientation of the movable display".

2) While Tanaka teaches means for detecting movement of the movable display relative to a first surface (col. 3, lines 37-55); means for correlating movement of the movable display to information representing a portion of a first image stored in a database (col. 3, line 56 - col. 4, line 9); and presenting the information on the movable display (col. 3, lines 60-61); Cobbley teaches the image of keyboard that can be operated using the moveable

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display at column 1, lines 8-30. So, both of the references teach image information. While Tanaka fails to teach a keyboard image, Cobbley patent shows an image of keyboard at figure 1. The motivation of the combination would have been to allow the system using keyboard functionality without the need of a physical keyboard.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Mylinh Tran



Conferees:

Lynne Browne

Appeal Panel Member



**Lynne H. Browne**  
**Appeal Specialist, TQAS**  
**Technology Center 2100**

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